

## Waste Management

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February 28, 2011

Mr. Steven Chang, P.E.

Solid and Hazardous Waste Branch

State of Hawaii Department of Health

919 Ala Moana Blvd, Room

Honolulu, HI 96814

Mr. Stuart Yamada, P.E., Chief

**Environmental Management Division** 

State of Hawaii Department of Health

919 Ala Moana Blvd, Room 300

Honolulu, HI 96814

Re: Request to Discharge Stormwater

Waimanalo Gulch Sanitary Landfill

Solid Waste Management Permit No. LF-0182-09

Dear Mr. Chang and Mr. Yamada:

As you are aware, Waste Management of Hawaii, Inc. (WMH) has been pumping the water contained in the sedimentation pond for approximately one month and discharging to the wastewater treatment plant. At the request of the Department of Health (DOH), WMH initiated this practice following severe storms that passed through the islands in January 2011. The DOH was apparently concerned about the possibility for discharging potentially contaminated storm water from the site.

On February 2, 2011 Waste Management collected a sample to characterize the remaining water stored in the sedimentation basin. These results are attached and indicate that the water is similar in characteristics to storm water and not impacted by landfill operations, including leachate. The results are below the screening criteria indentified in the Sites Storm Water Permit and the USEPA benchmark levels for storm water.

Based on these results and our knowledge of the sedimentation basin, WM is requesting DOH's concurrence that the storm water retained in the sedimentation basin may be discharged through WGSL's authorized discharge point. Further as part of WM's efforts to restore the sedimentation basin to pre-storm conditions, WM plans to resume discharging, pursuant to its permits and plans, stormwater generated from future storm events. This will enable WM to more quickly restore the sedimentation pond and meet the terms of the Administrative Order of Consent (AOC) entered into with the USEPA on January 13, 2011. While WMH is not aware of any legal requirement that prohibits the site from discharging stormwater from the sedimentation

basin, WMH nonetheless would like to know whether DOH objects to its plan to discharge stormwater from the sedimentation basin or is aware of any legal prohibition against it.

The sediment pond is divided into two areas by a separation berm that cuts the pond approximately in half. The upper half of the pond was nearly empty of water but full of sediment and the lower half of the pond still had a limited amount of water remaining, until recent storms on February 22nd and February 23<sup>rd</sup>, which added approximately 3 feet of water into the pond. The workplan that WGSL submitted requires that the pond sediment be removed to pre-storm elevations and that the underdrains in the lower half be inspected and filter media replaced. As part of this effort, WM began removing sediment from the pond. If rainfall continues to affect the site, it is likely that the sediment pond will overtop and discharge water, despite our efforts to restore the basin.

Since the stormwater contained in this pond has been tested and is similar to water normally discharged from the facility, WM would appreciate your earliest concurrence of our proposed plan to resume discharging stormwater, as directed by the landfill permit. Please contact me at 668-2985 if you have any questions.

Best regards,

Joseph R. Whelan

General Manager/Vice President Waste Management of Hawaii

CC: Lene Ichinotsubo, Hawaii Department of Health

Rick Von Pein, Waste Management

File

## Waimanalo Gulch Sanitary Landfill Sediment Pond Water Sample

Collected on 2/2/2011

Laboratory Final Data Summary Table

Analyte	Unit	Screening Criteria a	Benchmark Level b	SED POND
HEM (Oil and Grease)	mg/L	15	15	2 J
Alpha-Terpineol	mg/L	0.016	NA	< 0.01
Benzoic acid	mg/l.	0.071	NA NA	< 0.05
p-Cresol	mg/L	0.014	NA	< 0.01
Pentchlorophenol	mg/L	0.02	NA NA	< 0.021 *
Phenol	mg/L	0.015		< 0.01
Arsenic	mg/L	0.36		0.0057 J
Cadmium	mg/L	0.003		< 0.005
Calcium	mg/L	NA		48
Iron	mg/L	1	<del></del>	4.6
Lead	mg/L	0.029		< 0.009
Magnesium	mg/L	NA		25
Potassium	mg/L:	NA		5.8
Selenium	mg/L	0.02	<del> </del>	< 0.015
Silver	mg/L	0.001		< 0.00093 *
Sodium		NA NA		110
Zinc	<del></del>			0.019 J
Mercury	<del></del>			0.000055 J
Hexavalent Chromium				< 10
Phosphorus, Total		·		0.21
Ammonia				0.3 B
Nitrate-Nitrite as Nitrogen	<del> </del>			0.072 J
Nitrogen, Total				1.9
BOD (5-Day)				4.18
Chemical Oxygen Demand	<del></del>			36
Total Suspended Solids				26
Bromide			<del></del>	0.85
Chloride				120
Sulfate				110
Bicarbonate Alkalinity	T			170
Carbonate Alkalinity				4.7 J
Total Alkalinity				170
Total Coliform	MPN/100 mL			
E. coli	MPN/100 mL			170
				< 2.0 7.22
	HEM (Oil and Grease) Alpha-Terpineol Benzoic acid p-Cresol Pentchlorophenol Phenol Arsenic Cadmium Calcium Iron Lead Magnesium Potassium Selenium Silver Sodium Zinc Mercury Hexavalent Chromium Phosphorus, Total Ammonia Nitrate-Nitrite as Nitrogen Nitrogen, Total BOD (5-Day) Chemical Oxygen Demand Total Suspended Solids Bromide Chloride Sulfate Bicarbonate Alkalinity Carbonate Alkalinity Total Alkalinity Total Coliform	HEM (Oil and Grease)  Alpha-Terpineol Benzoic acid p-Cresol Pentchlorophenol Phenol Arsenic Cadmium Calcium Iron Belenium Selenium Selenium Selenium Sodium Mercury Mercury Mercury Mercury Mercury Mitrate-Nitrite as Nitrogen Nitrogen, Total BOD (5-Day) Chemical Oxygen Demand Total Suspended Solids Biored Bicarbonate Alkalinity Total Alkalinity Mg/L Mg/L Mg/L Mg/L Mg/L Mg/L Mg/L Mg/L	HEM (Oil and Grease)   mg/L   15	HEM (Oil and Grease)   mg/L   15   15   15   15   15   15   15   1

## Note:

a	screening criteria are based on the requirements in the Waimanalo Gulch Storm Water Discharge Permit
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b	benchmark levels are developed by EPA for storm water discharge
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**Bold** exceed screening criteria

< not detected above the reporting limits

\* not detected above the method detection limits

μg/L micrograms per liter

mg/L milligrams per liter

B compound was found in the method blank (0.0241 J mg/L for Ammonia)

BOD biochemical oxygen demand

HEM n-hexane extractable material MPN most probable number

NA no limitation at this time

gestimated result is less than the reporting limit but greater than or equal to the method detection limit

SU standard unit



